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Docket No.: 7161-142U

PATENT

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE  
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES**

Application Number: 09/557,708  
Filing Date: April 25, 2000  
Appellant: Christopher GAGE, et al.  
Entitled: URL BASED STICKY ROUTING TOKENS USING  
A SERVER SIDE COOKIE JAR  
Examiner: Baugh, April L.  
Group Art Unit: 2141  
Attorney Docket No: 7161-96U

**TRANSMITTAL OF APPEAL BRIEF**

Mail Stop Appeal Brief - Patents  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

Submitted herewith is Appellants' Appeal Brief in support of the Notice of Appeal filed July 18, 2005. Please charge the Appeal Brief fee of \$500.00 to Deposit Account 09-0461.

To the extent necessary, a petition for an extension of time under 37 C.F.R. § 1.136 is hereby made. Please charge any shortage in fees due under 37 C.F.R. §§ 1.17, 41.20, and in connection with the filing of this paper, including extension of time fees, to Deposit Account 09-0461, and please credit any excess fees to such deposit account.

Date: September 19, 2005

Respectfully submitted,

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Docket No.: RSW920000039US1 (7161-96U)

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**APPEAL BRIEF**

Mail Stop Appeal Brief - Patents  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

This Appeal Brief is submitted in support of the Notice of Appeal filed July 18, 2005, wherein Appellants appeal from the Examiner's rejection of claims 1-27.

**I. REAL PARTY IN INTEREST**

This application is assigned to IBM Corporation by assignment recorded on August 22, 2000, at Reel 011152, Frame 0250.

**II. RELATED APPEALS AND INTERFERENCES**

Appellants are unaware of any related appeals and interferences.

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### **III. STATUS OF CLAIMS**

Claims 1-27 are pending and finally rejected in this Application. It is from the final rejection of claims 1-27 that this Appeal is taken.

### **IV. STATUS OF AMENDMENTS**

The claims have not been amended subsequent to the imposition of the Final Office Action dated March 18, 2005. Although a Response was submitted pursuant to the provisions of 37 C.F.R. § 1.116 on May 19, 2005, this Response did not make any changes or additions to the claims.

### **V. SUMMARY OF CLAIMED SUBJECT MATTER**

Independent claims 1, 7, 10, 12, 18, 20, and 22 are respectively directed to methods, computer program products, and a network dispatcher for establishing a persistent relationship between a client and a selected one of a plurality of servers managed by a dispatcher. Referring to the page 8 of the specification, a session routing token can be inserted in a uniform resource locator (URL) request during an communications session between a client and a server. Consequently, a dispatching mechanism/dispatcher can route client requests for information to the server during the session based upon server-identifying information disposed in the token in the URL. Prior to routing the requests to the designated server, however, the token/routing information can be removed from the URL and stores such that an outbound filter can subsequently access the routing information.

In conjunction with the URL modification, a server-side cookie jar (i.e., server-side storage area) is used to store cookies (i.e., information regarding the persistent relationship and the client) on behalf of a particular client. This releases the client or client-side proxies from the responsibility of storing the cookies.

## **VI. ISSUES TO BE REVIEWED ON APPEAL**

1. Claims 1-2, 6-7, 12-13, 17-18, 22-23, and 27 were rejected under 35 U.S.C. § 103 for obviousness based upon Courts et al., U.S. Patent No. 6,076,108 (hereinafter Courts), in view of Kunzelman et al., U.S. Patent No. 6,041,357 (hereinafter Kunzelman), and Smith, U.S. Patent No. 5,835,724;

2. Claims 3-5, 14-16, and 24-26 were rejected under 35 U.S.C. § 103 for obviousness based upon Courts in view of Kunzelman, Smith, and Vanstone et al., U.S. Patent No. 6,490,682 (hereinafter Vanstone);

3. Claims 8-9 and 19 were rejected under 35 U.S.C. § 103 for obviousness based upon Courts in view of Kunzelman, Smith, and Colby et al., U.S. Patent No. 6,006,264 (hereinafter Colby);

4. Claims 10 and 20 were rejected under 35 U.S.C. § 103 for obviousness based upon Kunzelman in view of Courts, Smith, and Lund et al., U.S. Patent No. 6,760,758 (hereinafter Lund); and

5. Claims 11 and 21 were rejected under 35 U.S.C. § 103 for obviousness based upon Kunzelman in view of Courts, Smith, Lund, and Colby.

## **VII. THE ARGUMENT**

### **THE REJECTION OF CLAIMS 1-2, 6-7, 12-13, 17-18, 22-23, AND 27 UNDER 35 U.S.C. § 103 FOR OBVIOUSNESS BASED UPON COURTS IN VIEW OF KUNZELMAN AND SMITH**

For convenience of the Honorable Board in addressing the rejections, claims 2, 6, 12-13, 17, 22-23, and 27 stand or fall together with independent claim 1, and claim 18 stands or falls together with independent claim 7.

Appellants respectfully submit that the Examiner has failed to discharge the initial burden of establishing a prima facie basis to deny patentability to the claimed invention under 35 U.S.C. § 103.<sup>1</sup> In rejecting a claim under 35 U.S.C. § 103, the Examiner is required to identify a source in the applied prior art for: (1) claim limitations; and (2) the motivation to combine references or modify a reference in the reasonable expectation of achieving a particular benefit.<sup>2</sup> In so doing, it is legally erroneous to ignore any claim limitation.<sup>3</sup>

#### **Independent Claim 1**

Independent claim 1 recites "creating, at the selected server, a token comprising at least an identifier for the selected server." On page 3 of the Final Office Action, the Examiner asserted that Kunzelman teaches this limitation and cited for support column 2, lines 55-57; column 4, lines 33-49; column 4, lines 64 through column 5, line 9; and column 6, lines 43-45 of Kunzelman. Upon reviewing these passages, Appellants respectfully disagree that Kunzelman teaches this limitation.

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<sup>1</sup> In re Mayne, 104 F.3d 1339, 41 USPQ2d 1451 (Fed. Cir. 1997); In re Oetiker, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992).

<sup>2</sup> Smiths Industries Medical System v. Vital Signs Inc., 183 F.3d 1347, 51 USPQ2d 1415 (Fed. Cir. 1999).

<sup>3</sup> Uniroyal, Inc. v. Rudkin-Wiley Corp., 837 F.2d 1044, 5 USPQ2d 1434 (Fed. Cir. 1988).

Unlike the claimed invention, which is directed to a "method of establishing a persistent relationship between an end user device and a server where the server is a particular one of a plurality of redundant servers managed by a dispatcher," Kunzelman is directed to a manner of migrating a client from one server to another server "in a way that is transparent to the client's user" (column 3, lines 28-44). Whereas in the claimed invention, the selected server creates a token that includes an identifier for the selected server, Kunzelman teaches that a server (i.e., server A 14A) creates a session token 104 that includes an identifier for another server (i.e., server B 14B) to which the client is to be migrated. Thus, the Examiner has improperly asserted that Kunzelman discloses the above-identified claimed limitation.

Therefore, even if the applied prior art were combined in the manner suggested by the Examiner, the claimed invention would not result since the Examiner has not established that the applied prior art teaches all of the claimed limitations recited in claim 1. Independent claims 12 and 22 include similar limitations to those recited in claim 1 and are patentable over the applied prior art at least for the same reasons. Appellants, therefore, respectfully submit that the imposed rejection of claims 1-2, 6, 12-13, 17, 22-23, and 27 under 35 U.S.C. § 103 for obviousness based upon Courts in view of Kunzelman and Smith is not viable and, hence, solicit withdrawal thereof.

### Independent Claim 7

Appellants respectfully submit that the Examiner has improperly relied upon the applied prior art to teach certain of the claimed limitations; and thus, the Examiner has failed to establish that the applied prior art teaches or suggests all of the claim limitations.

On page 4 of the Final Office Action, the Examiner cited column 6, line 45 of Courts to teach if a session binding is old (i.e., the claimed "determining, at the network dispatching mechanism, if a session binding indicated by said routing token is old"). For ease of reference, column 6, lines 43-48 of Courts is reproduced below:

Engine manager 120 is the system element that receives requests from the broker 102, binds the request to an available render engine 122, delivers the request to a render engine 122, receives the results from the render engine 122, and delivers the results back to broker 102.

A review of this cited passage does not yield any teaching of a determination that a session binding, as indicated by a routing token, is old. Therefore, the Examiner has improperly asserted that Courts discloses the above-identified claimed limitation.

On page 4 of the Final Office Action, the Examiner cited column 3, line 5-7 and column 6, line 4 of Courts to teach the claimed "forwarding, by said network dispatching mechanism, the request, including the URL, to the particular server." For ease of reference, column 3, lines 5-7 and column 5, line 66 through column 6, line 5 of Courts are reproduced below:

Interaction layer 12 can be responsible for enforcing security, managing sessions, and distributing request to the most available servers.

As shown in FIG. 2A, a load distribution unit 98 receives user URL requests. Load distribution unit 98 then distributes each URL request to one of a plurality of physical computer systems for processing. In one implementation, load distribution unit 98 can be a CISCO Front End Local Director which uses a "round robin" or "least connections" algorithm for routing requests.

Although Courts teaches distributing a URL request, the claimed limitation also recites that in addition to the request, the actual URL is also forwarded to the particular server. However, the



Examiner has not established that Court explicitly or inherently (i.e., necessarily) teaches that the actual URL, which generates the request, is forwarded along with the request to the particular server. Therefore, the Examiner has improperly asserted that Courts teaches the claimed "forwarding, by said network dispatching mechanism, the request, including the URL, to the particular server" (emphasis added).

As already noted above, the Examiner has not establish that the request, including the URL, is forwarded to the particular server. Additional discussion of the URL is found in independent claim 7, which further recites:

removing, by said particular server, said valid routing information from the URL;

storing, by said particular server, said routing information removed from said valid routing token, where said valid routing information can be accessed subsequently by an outbound data stream filter during the processing of an outbound reply related to said request;

On page 4 of the Final Office Action, the Examiner cited column 1, lines 48-53 of Courts to teach the above-identified limitations. For ease of reference column 1, lines 48-53 is reproduced below:

Session data representing a state of the user session is stored in memory in a global session server. Then, for each subsequent request associated with the user session, the subsequent request is received, and the session data is retrieved from the global session server.

Not only has the Examiner failed to establish that a request, including an URL, is forwarded to a server. The citation reproduced above also fails to teach that valid routing information is removed from the URL by the server. This citation within Courts also fails to teach that the routing information removed from the URL is stored and can be accessed subsequently by an

outbound data stream filter during the processing of an outbound reply related to the request. Appellants also note that the Examiner has not clearly identified those elements within Courts being relied upon. For example, the Examiner has not identified the outbound data stream filter. In this regard, the Examiner's rejection under 35 U.S.C. § 103 also fails to comply with 37 C.F.R. § 1.104(c).<sup>4</sup>

In the paragraph spanning pages 4 and 5 of the Final Office Action, the Examiner cited column 2, lines 34-44 and 55-56 of Kunzelman and asserted that:

Kunzelman et al. teaches determining, at the network dispatching mechanism, if said URL contains a valid routing token; if said URL contains a valid routing token and said routing token is not old, forwarding the request, including the URL, to the particular server indicated by said valid routing token.

For ease of reference column 2, lines 34-44 and 55-56 of Kunzelman are reproduced below:

When the client wishes to migrate from the first server to a second server, the client requests a session token from the first server. The session token is a data element generated by the first server which is unique over the client-server network being navigated and identifies the particular session with the first server. The session token is preferably a difficult to forge data element, such as a data element digitally signed using the private key of the first server and possibly encrypted. The session token might also be encrypted, using public key encryption or other methods, to prevent the session token from being easily readable. In the preferred embodiment, the token is passed in a URL (Uniform Resource Locator). However, it also might be passed as an HTTP "cookie".

At the outset, Appellants note that the Examiner's citation is found in the "Summary of the Invention" portion of Kunzelman and provides little guidance to Appellants as to those features within Kunzelman that the Examiner is relying upon to teach the claimed invention.

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<sup>4</sup> 37 C.F.R. § 1.104(c) provides:

In rejecting claims for want of novelty or for obviousness, the examiner must cite the best references at his or her command. When a reference is complex or shows or describes inventions other than that claimed by the applicant, the particular part relied on must be designated as nearly as practicable. The pertinence of each reference, if not apparent, must be clearly explained and each rejected claim specified.

Furthermore, the Examiner has not clearly identified those elements within Kunzelman being relied upon, and thus, the rejection fails to comply with 37 C.F.R. § 1.104(c).

Notwithstanding the ambiguity of the Examiner's assertions regarding Kunzelman, Appellants note that Kunzelman is not comparable to the claimed invention, which recites "a plurality of redundant servers residing behind a network dispatching mechanism ... receiving, at the network dispatching, a request for information ... [and] if said URL contains a valid routing token ... forwarding by said network dispatching mechanism, the request ... to the particular server." Kunzelman fails to teach a networking dispatching mechanism (i) behind which, resides a plurality of servers and (ii) that receives a request for information that includes a routing token for determining to which server the request is to be forwarded. Instead, as evident from Figs. 1 and 2 of Kunzelman, the client 23 (i.e., the requestor) connects (via the internet) to either server A 14A or server B 14B respectively using logical channels 20A, 20B. There is, however, no teaching within Kunzelman of a network dispatching mechanism that includes the features of (i) and (ii).

Furthermore, with regard to the specific assertions made by the Examiner in the paragraph spanning pages 4 and 5 of the Final Office Action, the Examiner's cited portions within Kunzelman is completely silent as to Kunzelman determining "if ... said routing token is not old."

Unlike the claimed invention, which is directed to a "method of routing a request by an end user device to a particular one of a plurality of redundant servers residing behind a network

dispatching mechanism," Kunzelman is directed to a manner of migrating a client from one server to another server "in a way that is transparent to the client's user" (column 3, lines 28-44). Moreover, Kunzelman teaches away from the claimed invention by teaching that "[u]nlike a centralized access control system" (i.e., comparable to the claimed network dispatching mechanism) "severs 14A and 14B are separately controlled" (column 3, lines 30-32).

Therefore, even if the applied prior art were combined in the manner suggested by the Examiner, the claimed invention would not result since the Examiner has not established that the applied prior art teaches all of the claimed limitations recited in claim 7. Independent claim 18 includes similar limitations to those recited in claim 7 and is patentable over the applied prior art at least for the same reasons. Appellants, therefore, respectfully submit that the imposed rejection of claims 7 and 18 under 35 U.S.C. § 103 for obviousness based upon Courts in view of Kunzelman and Smith is not viable and, hence, solicit withdrawal thereof.

**THE REJECTION OF CLAIMS 3-5, 14-16, AND 24-26 UNDER 35 U.S.C. § 103 FOR OBVIOUSNESS BASED UPON COURTS IN VIEW OF KUNZELMAN, SMITH AND VANSTONE**

For convenience of the Honorable Board in addressing the rejections, claims 3-5, 14-16, and 24-26 stand or fall together with independent claim 1.

Claims 3-5, 14-16, and 24-26 respectively depend from independent claims 1, 12, and 22, and Appellants incorporate herein the arguments previously advanced in traversing the imposed rejection of claims 1, 12, and 12 under 35 U.S.C. § 103 for obviousness based upon Courts in view of Kunzelman and Smith. Specifically, even if the applied prior art were combined in the manner

suggested by the Examiner, the claimed invention would not result since the Examiner has not established that the applied prior art teaches all of the claimed limitations recited in claims 1, 12 and 22. The additional reference to Vanstone does not cure the deficiencies of the combination of Courts in view of Kunzelman and Smith. Accordingly, the proposed combination of references would not yield the claimed invention. Appellants, therefore, respectfully submit that the imposed rejection of claims 3-5, 14-16, and 24-26 under 35 U.S.C. § 103 for obviousness based upon Courts in view of Kunzelman, Smith, and Vanstone is not viable and, hence, solicit withdrawal thereof.

**THE REJECTION OF CLAIMS 8-9 AND 19 UNDER 35 U.S.C. § 103 FOR OBVIOUSNESS  
BASED UPON COURTS IN VIEW OF KUNZELMAN, SMITH, AND COLBY**

For convenience of the Honorable Board in addressing the rejections, claims 8-9 and 19 stand or fall together with independent claim 7.

Claims 8-9 and 19 respectively depend from independent claims 7 and 18, and Appellants incorporate herein the arguments previously advanced in traversing the imposed rejection of claims 7 and 18 under 35 U.S.C. § 103 for obviousness based upon Courts in view of Kunzelman and Smith. Specifically, even if the applied prior art were combined in the manner suggested by the Examiner, the claimed invention would not result since the Examiner has not established that the applied prior art teaches all of the claimed limitations recited in claims 7 and 18. The additional reference to Colby does not cure the deficiencies of the combination of Courts in view of Kunzelman and Smith. Accordingly, the proposed combination of references would not yield the claimed invention. Appellants, therefore, respectfully submit that the imposed rejection of claims

8-9 and 19 under 35 U.S.C. § 103 for obviousness based upon Courts in view of Kunzelman, Smith, and Colby is not viable and, hence, solicit withdrawal thereof.

**THE REJECTION OF CLAIMS 10 AND 20 UNDER 35 U.S.C. § 103 FOR OBVIOUSNESS  
BASED UPON KUNZELMAN IN VIEW OF COURTS, SMITH, AND LUND**

For convenience of the Honorable Board in addressing the rejections, claim 20 stands or falls together with independent claim 10.

Independent claim 10 recites "removing all cookies from said response information; storing said removed cookies in a predetermined server-side storage area." In the paragraph spanning pages 14 and 15 of the Final Office Action, the Examiner cited column 2, lines 55-57; column 5, lines 38-62; and column 6, lines 43-57 of Kunzelman to teach these limitations, among others. At the outset, Appellants note that the Examiner has not clearly identified those elements within Kunzelman being relied upon. In this regard, the Examiner's rejection under 35 U.S.C. § 103 fails to comply with 37 C.F.R. § 1.104(c).

Notwithstanding the ambiguity of the Examiner's assertions regarding Kunzelman, a review of the Examiner's citation fails to yield any teaching that all cookies are removed from response information and that these removed cookies are stored in a predetermined server-side storage area. Therefore, the Examiner has improperly asserted that Kunzelman discloses the above-identified claimed limitations.

Since the Examiner has not established that the applied prior art teaches all of the claimed limitations recited in claim 10, the proposed combination of references would not yield the claimed invention. Independent claim 20 includes similar limitations to those recited in claim 10 and is patentable over the applied prior art at least for the same reasons. Appellants, therefore, respectfully submit that the imposed rejection of claims 10 and 20 under 35 U.S.C. § 103 for obviousness based upon Kunzelman in view of Courts, Smith, and Lund is not viable and, hence, solicit withdrawal thereof.

**THE REJECTION OF CLAIMS 11 AND 21 UNDER 35 U.S.C. § 103 FOR OBVIOUSNESS  
BASED UPON KUNZELMAN IN VIEW OF COURTS, SMITH, LUND, AND COLBY**

For convenience of the Honorable Board in addressing the rejections, claims 11 and 20 stand or fall together with independent claim 10.

Claims 11 and 21 respectively depend from independent claims 10 and 20, and Appellants incorporate herein the arguments previously advanced in traversing the imposed rejection of claims 10 and 20 under 35 U.S.C. § 103 for obviousness based upon Kunzelman in view of Courts, Smith, and Lund. Specifically, even if the applied prior art were combined in the manner suggested by the Examiner, the claimed invention would not result since the Examiner has not established that the applied prior art teaches all of the claimed limitations recited in claims 11 and 21. The additional reference to Colby does not cure the deficiencies of the combination of Kunzelman in view of Courts, Smith, and Lund. Accordingly, the proposed combination of references would not yield the claimed invention. Appellants, therefore, respectfully submit that the imposed rejection

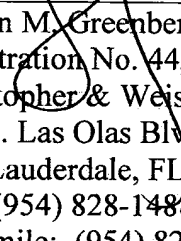
of claims 11 and 21 under 35 U.S.C. § 103 for obviousness based upon Kunzelman in view of Courts, Smith, Lund, and Colby is not viable and, hence, solicit withdrawal thereof.

Conclusion

Based upon the foregoing, Appellants respectfully submit that the Examiner's rejections under 35 U.S.C. § 103 are not factually or legally viable. Appellants, therefore, respectfully solicit the Honorable Board to reverse the Examiner's rejections under 35 U.S.C. § 103.

Date: September 19, 2005

Respectfully submitted,



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## **VIII. CLAIMS APPENDIX**

1. A method of establishing a persistent relationship between an end user device and a server where the server is one of a plurality of servers managed by a dispatcher and the end user device accesses the server using a uniform resource locator (URL), the method comprising the steps of:

receiving at the dispatcher, a request for information from the end user device;

determining by the dispatcher, which of the plurality of servers to select for satisfying the request;

creating, at the selected server, a token comprising at least an identifier for the selected server, a date/time stamp, and a key, said key for accessing a server-side storage area for information regarding the persistent relationship and the end user device;

inserting the token into the URL; and,

sending, by the selected server to the client device, a response with the token inserted into the URL.

2. A method as claimed in claim 1 wherein said token is encoded using a modified Base64 encoding.

3. A method as claimed in claim 1 wherein said token has a checksum or hash verification field.

4. A method as claimed in claim 3 wherein said hash is a SHA-1 hash computed over said identifier for said selected server, said date/time stamp, and said key.

5. A method as claimed in claim 3 wherein said checksum or hash is encoded using a modified Base64 encoding.

6. A method as claimed in claim 1 wherein said information regarding said persistent relationship is stored as a cookie on said server.

7. (Currently Amended) A method of routing a request by an end user device to a particular one of a plurality of redundant servers residing behind a network dispatching mechanism, said methods comprising the steps of:

receiving, at the network dispatching mechanism, a request for information indicated by a uniform resource locator (URL);

determining, at the network dispatching mechanism, if said URL contains a valid routing token;

if said URL contains a valid routing token, further determining, at the network dispatching mechanism, if a session binding indicated by said routing token is old;

if said URL contains a valid routing token and said routing token is not old, forwarding, by said network dispatching mechanism, the request, including the URL, to the particular server indicated by said valid routing token;

removing, by said particular server, said valid routing information from the URL;

storing, by said particular server, said routing information removed from said valid routing token, where said valid routing information can be accessed subsequently by an outbound data stream filter during the processing of an outbound reply related to said request;

accessing, by said particular server, a server-side storage location where session information regarding a session between the particular server and the end user device is stored; and,

inserting, by said particular server, said accessed session information into said request.

8. A method as claimed in claim 7 wherein additional filtering of the URL is done prior to the forwarding step.

9. A method as claimed in claim 1 wherein all filtering is performed within the dispatcher.

10. A method of sending information to a requesting end user from an application over a session wherein said application resides at one of a plurality of redundant servers residing behind a network dispatcher, said method comprising the steps of:

receiving response information from said application, said response information including a URL (uniform resource locator);

determining if a server-side key cookie has been used for storing session information between said end user and said application;

if a server-side key cookie has been used for storing session information, retrieving a session key from said key cookie;

if a key cookie was not used for storing session information, retrieving said session key from a control block;

removing all cookies from said response information;

storing said removed cookies in a predetermined server-side storage area;

updating said URL to indicate the removal of said cookies;

creating a sticky routing string;

updating a date/time stamp in said sticky routing string;

inserting said sticky routing string into said URL; and,

transmitting said response information, including said URL to said end user.

11. A method as claimed in claim 10 wherein, prior to said determining step, said response information is transmitted from said application through one or more filters.

12. A computer program product having computer readable code means of establishing a persistent relationship between an end user device and a server where the server is one of a plurality of servers managed by a dispatcher and the end user device accesses the server using a uniform resource locator (URL), the computer program product comprising:

computer readable code means of receiving at the dispatcher, a request for information from the end user device;

computer readable code means of determining by the dispatcher, which of the plurality of servers to select for satisfying the request;

computer readable code means of creating, at the selected server, a token comprising at least an identifier for the selected server, a data/time stamp, and a key, said key for accessing a

server-side storage area for information regarding the persistent relationship and the end user device;

computer readable code means of inserting the token into the URL; and,

computer readable code means of sending, by the selected server to the client device, a response with the token inserted into the URL.

13. A computer program product as claimed in claim 12 wherein said token is encoded using a modified Base64 encoding.

14. A computer program product as claimed in claim 12 wherein said token has a checksum or hash verification field.

15. A computer program product as claimed in claim 14 wherein said hash is a SHA-1 hash computed over said identifier for said selected server, said date/time stamp, and said key.

16. A computer program product as claimed in claim 14 wherein said checksum or hash is encoded using a modified Base64 encoding.

17. A computer program product as claimed in claim 12 wherein said information regarding said persistent relationship is stored as a cookie on said server.

18. A computer program product having computer readable code means for routing a request by an end user device to a particular one of a plurality of redundant servers residing behind a network dispatching mechanism, said computer program product comprising:

computer readable program code for receiving, at the network dispatching mechanism, a request for information indicated by a uniform resource locator (URL);

computer readable program code for determining, at the network dispatching mechanism, if said URL contains a valid routing token;

if said URL contains a valid routing token, computer readable program code for further determining, at the network dispatching mechanism, if a session binding indicated by said routing token is old;

if said URL contains a valid routing token and said routing token is not old, computer readable program code for forwarding, by said network dispatching mechanism, the request, including the URL, to the particular server indicated by said valid routing token;

computer readable program code for removing, by said particular server, said valid routing information from the URL;

computer readable program code for storing, by said particular server, said routing information removed from said valid routing token, where said valid routing information can be accessed subsequently by an outbound data stream filter during the processing of an outbound reply related to said request;

computer readable program code for accessing, by said particular server, a server-side storage location where session information regarding a session between the particular server and the end user device is stored; and,

computer readable program code for inserting, by said particular server, said accessed session information into said request.

19. The computer program product as claimed in claim 18 wherein additional filtering of the URL is done prior to the forwarding step.

20. A computer program product having computer readable code means of sending information to a requesting end user from an application over a session wherein said application resides at one of a plurality of redundant servers residing behind a network dispatcher, said computer program product comprising:

computer readable programming means of receiving response information from said application, said response information including a URL (uniform resource locator);

computer readable programming means of determining if a server-side key cookie has been used for storing session information between said end user and said application;

if a server-side key cookie has been used for storing session information, computer readable programming means of retrieving a session key from said key cookie;

if a key cookie was not used for storing session information, computer readable programming means of retrieving said session key from a control block;

computer readable programming means of removing all cookies from said response information;

computer readable programming means of storing said removed cookies in a predetermined server-side storage area;

computer readable programming means of updating said URL to indicate the removal of said cookies;

computer readable programming means of creating a sticky routing string;

computer readable programming means of updating a date/time stamp in said sticky routing string;

computer readable programming means of inserting said sticky routing string into said URL; and,

computer readable programming means of transmitting said response information, including said URL to said end user.

21. A computer program product as claimed in claim 20 wherein, prior to said determining step, said response information is transmitted from said application through one or more filters.

22. A network dispatcher for establishing a persistent relationship between an end user device and a server where the server is one of a plurality of servers managed by said network dispatcher comprising:

means for receiving a request for information from said end user device, said request for information including a uniform resource locator (URL);

means for determining which of the plurality of servers to select for satisfying said request for information;



means for creating, at said selected server, a token comprising at least an identifier for the selected server, a date/time stamp, and a key, said key for accessing a server-side storage area for information regarding the persistent relationship and the end user device;

means for inserting the token into the URL; and,

means for sending, by the selected server, a response with the token inserted into the URL to the client device.

23. A network dispatcher as claimed in claim 22 wherein said token is encoded using a modified Base64 encoding.

24. A network dispatcher as claimed in claim 22 wherein said token has a checksum or hash verification field.

25. A network dispatcher as claimed in claim 24 wherein said hash is a SHA-1 has computed over said identifier for said selected server, said date/time stamp, and said key.

26. A network dispatcher as claimed in claim 24 wherein said checksum or hash is encoded using a modified Base64 encoding.

27. A network dispatcher as claimed in claim 22 wherein said information regarding the persistent relationship is stored as a cookie on said server.